

REMARKS/ARGUMENTS

Reconsideration of the above-identified application in view of the present amendment is respectfully requested. By the present amendment, claims 6 and 13 have been amended. New claims 14-23 have been added.

Claim Rejections under 35 U.S.C. §103

Claims 1-2, 4-8, 11, and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,290,536 to Morel (hereafter "Morel") in view of U.S. Patent No. 4,588,105 to Schmitz et al. (hereafter "Schmitz"). That rejection is respectfully traversed.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Claim 1 recites a plug for sealing holes in a vehicle body that includes a central closure section and an engaging section arranged on the rim and provided for receiving portions of the vehicle body. The closure section includes a closed axial end and an open axial end. The engaging section is made of a plastics material that is adapted to be softened by heating. The engaging section has a surrounding sealing lip that forms a latching connection with an edge of the hole in the vehicle body and a further sealing lip that engages the opposite side of the edge of the hole in the vehicle body. The engaging section is inserted in a deepening on the rim side of the closure section.

Morel does not teach or suggest a plastic engaging section that is softened by heating and which has a sealing lip that forms a latching connecting with an edge of

a hole in a vehicle body or a further sealing lip that engages an opposite side of the edge of the hole in the vehicle body. Morel teaches a sealing plug 1 that includes a cylindrical barrel 2 having annular shoulders 4 and an annular crown portion 6. A thermofusible ring 8 includes inner circular lips 10 that are snapped into the annular shoulders 4 and an outer bead 9 that is received in a groove 7 in the crown portion 6 of the plug 1 (Fig. 4).

In use, the plug 1 is pushed through an aperture O in a panel P until the shoulders 4 of the cylindrical barrel snap into engagement with the underside of the panel. This positions the entire thermofusible ring 8 on top of the panel P between the crown portion 6 and the shoulders 4 of the plug 1. The assembly is then transferred into a bake zone and heated such that the thermofusible ring 8 melts in the channel 7, causing the crown portion 6 to be held in a state of permanent pressure against the panel P. The lips 10 also melt and fill in the space between the cylindrical barrel 2 and the aperture O to obtain a perfect seal (Col. 2, lines 42-51).

Examination of Figs. 2 and 3 of Morel, however, shows that the shoulders 4 of the plug 1 that engage the underside of the panel P do not melt when the assembly is placed in the bake zone. It is also clear that neither the outer bead 9 nor the lips 10 of the ring 8 forms a latching connection with an edge of the aperture O. Rather, the outer bead 9 remains spaced from the aperture O before and after the ring 8 is heated. Before heating, the lips 10 are spaced from the edge of the aperture O, and during heating the lips melt into solidified engagement – not a latched connection – with the edge of the aperture. Therefore, the ring 8 of Morel

does not include a heat softened plastic sealing lip that forms a latching connection with an edge of a hole in a vehicle body, as recited in claim 1.

Furthermore, it is clear that neither the unmelted nor melted ring 8 engages opposing sides of the edge defining the aperture O. As shown in Figs. 2-3, the ring 8 only engages the top surface of the panel P surrounding the aperture O. In other words, the ring 8 does not engage both the top surface and the bottom surface of the panel P at any time. Rather, the unmelted shoulder 4 engages the underside of the panel P while the melted ring 8 overlies the top surface of the panel. Therefore, Morel does not teach or suggest heat softened plastic sealing lips that engage opposing sides of the edge of a hole in a vehicle body.

The Examiner asserts that the preamble of claim 1 requires only that the plug 1 of Morel be capable of forming a latching connection with a hole in a vehicle body (Office Action page 2). As noted, however, the plug 1 of Morel does not include multiple heat softened plastic sealing lips that engage opposing sides of an opening. Therefore, the plug 1 of Morel is not capable of engaging opposing sides of an opening in a vehicle body with heat softened plastic sealing lips as recited in claim 1.

Schmitz does not cure the deficiencies of Morel. In Schmitz, a heat sealable ring 3 is melted to provide a tight seal between a vehicle panel 30 and a sealing plug 1 that extends through an opening 31 in the panel. As shown in Fig. 11, however, the melted ring 3 merely rests atop the vehicle panel 30, i.e., the ring does not latch with the vehicle panel surrounding the opening 31. Furthermore, the melted ring 3 only contacts the top surface of the vehicle panel, i.e., the ring does not

engage both the top surface and bottom surface of the vehicle panel surrounding the opening. The melted ring 3 in Schmitz therefore does not 1) form a latching connection with the vehicle panel 30 or the opening 31, and 2) engage opposing sides of the edge of the opening in the vehicle panel. Accordingly, Schmitz does not cure the deficiencies of Morel. For these reasons, it is respectfully submitted that claim 1 is patentable over the combination of Morel and Schmitz and is therefore allowable.

Claims 2, 4-7, 11, and 13 depend from claim 1 and are allowable for at least the same reasons as claim 1 and for the specific limitations recited therein.

Claim 8 recites a plug for sealing holes in a vehicle body that includes a central closure section and an engaging section arranged on the rim and provided for receiving portions of the vehicle body. The engaging section is made of a plastics material that is adapted to be softened by heating. The engaging section has a surrounding sealing lip that forms a latching connection with an edge of the hole in the vehicle body and a further sealing lip that engages the opposite side of the edge of the hole in the vehicle body.

As noted, the combination of Morel and Schmitz does not teach or suggest a heat softened plastic sealing lip that forms a latching connecting with an edge of a hole in a vehicle body or a further sealing lip that engages the opposite side of the edge of the hole in the vehicle body. Furthermore, the plug 1 of Morel is incapable of sealing a hole in a vehicle body in the manner claimed. For these reasons, it is respectfully submitted that claim 8 is patentable over the combination of Morel and Schmitz and is therefore allowable.

Claim 3 was rejected under 35 U.S.C. §103(a) as being unpatentable over Morel in view of Schmitz and further in view of U.S. Patent No. 6,170,691 to Morris, Sr. Claim 3 depends from claim 1 and is allowable for at least the same reasons as claim 1 and for the specific limitations recited therein.

New Claims

Claims 14 and 19 recite that the sealing lip extends radially outward. Claims 15 and 20 recite that the engaging section has a U-shaped cross section. Claims 16 and 21 recite that the hole extends through oppositely facing first and second surfaces in the vehicle panel, the surrounding sealing lip engaging the first surface and the further sealing lip engaging the second surface when the plug is connected with the vehicle panel. Claims 17 and 22 recite that the surrounding sealing lip is radially spaced from the further sealing lip. Claims 18 and 23 recite that the surrounding sealing lip is axially spaced from the further sealing lip when the plug is connected to the vehicle body. It is respectfully submitted that the art of record does not teach or suggest this structure and, thus, claims 14-23 are patentable over the art of record and are therefore allowable.

In view of the foregoing, it is respectfully submitted that the application is allowable and allowance of the application is respectfully requested.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

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